

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of:)	
)	PS Docket No. 13-87
Proposed Amendments to the Service Rules)	
Governing Public Safety Narrowband Operations)	
in the 769-775/799-805 MHz Bands)	
)	WT Docket No. 96-86
The Development of Operational, Technical and)	
Spectrum Requirements for Meeting Federal,)	
State and Local Public Safety Communications)	
Requirements Through the Year 2010)	
)	RM-11433
National Public Safety Telecommunications)	
Council Petition for Rulemaking on Aircraft)	
Voice Operations at 700 MHz)	
)	RM-11433
National Public Safety Telecommunications)	
Council Petition for Rulemaking to Revise 700)	
MHz Narrowband Channel Plan)	
)	WT Docket No. 96-86
Region 24 700 MHz Regional Planning)	PS Docket No. 06-229
Committee Petition for Rulemaking)	
)	RM-11577
State of Louisiana Petition for Rulemaking)	

**REPLY COMMENTS OF
THE NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL**

The National Public Safety Telecommunications Council (NPSTC) submits these Reply Comments in response to the Commission’s Notice of Proposed Rulemaking in the above-captioned proceeding.¹ This proceeding addresses a number of rules and proposals for the public safety 700 MHz narrowband spectrum located at 769-775/799-805 MHz. These Reply Comments expand on and clarify issues addressed in NPSTC’s Comments submitted June 18, 2013.

¹ Seventh Report and Order and Notice of Proposed Rulemaking, PS Docket 13-87, WT Docket 96-86, RM-11433, PS Docket No. 06-229 and RM-11577, released April 1, 2013.

The National Public Safety Telecommunications Council

The National Public Safety Telecommunications Council is a federation of public safety organizations whose mission is to improve public safety communications and interoperability through collaborative leadership. NPSTC pursues the role of resource and advocate for public safety organizations in the United States on matters relating to public safety telecommunications. NPSTC has promoted implementation of the Public Safety Wireless Advisory Committee (PSWAC) and the 700 MHz Public Safety National Coordination Committee (NCC) recommendations. NPSTC explores technologies and public policy involving public safety telecommunications, analyzes the ramifications of particular issues and submits comments to governmental bodies with the objective of furthering public safety telecommunications worldwide. NPSTC serves as a standing forum for the exchange of ideas and information for effective public safety telecommunications.

The following 15 organizations participate in NPSTC:

- American Association of State Highway and Transportation Officials
- American Radio Relay League
- Association of Fish and Wildlife Agencies
- Association of Public-Safety Communications Officials-International
- Forestry Conservation Communications Association
- International Association of Chiefs of Police
- International Association of Emergency Managers
- International Association of Fire Chiefs
- International Municipal Signal Association
- National Association of State Chief Information Officers
- National Association of State Emergency Medical Services Officials
- National Association of State Foresters
- National Association of State Technology Directors
- National Emergency Number Association
- National Sheriffs' Association

Several federal agencies are liaison members of NPSTC. These include the Department of Homeland Security (the Federal Emergency Management Agency, the Office of Emergency Communications, the Office of Interoperability and Compatibility, and the SAFECOM Program;

Department of Commerce (National Telecommunications and Information Administration); Department of the Interior; and the Department of Justice (National Institute of Justice, CommTech Program). In addition, Public Safety Europe is also a liaison member. NPSTC has relationships with associate members, the Telecommunications Industry Association, the Canadian Interoperability Technology Interest Group, the National Council of Statewide Interoperability Coordinators, the Utilities Telecom Council and the Alliance for Telecommunications Industry Solutions.

NPSTC Reply Comments

In its Comments submitted in this proceeding, NPSTC recommended the Commission 1) eliminate or significantly extend the current December 31, 2016 deadline that requires operation at 6.25 kHz or equivalent efficiency; 2) modify the rules to allow low altitude, low power airborne public safety operations on certain channels currently designated for secondary trunked use; and 3) open the reserve channels for a combination of nationwide deployable use and permanent operations under certain conditions in areas where additional spectrum is required as determined by licensees and RPCs. NPSTC also addressed a number of additional issues the Commission had raised in the Seventh Notice of Proposed Rulemaking, including the Compliance Assessment Program. These NPSTC Reply Comments reaffirm and expand upon some of the issues addressed in NPSTC's original Comments.

1. The 6.25 kHz Efficiency Deadline

The current 700 MHz rules include both a final and interim deadline related to 6.25 efficiency or equivalent in the 700 MHz band.² The current rules set a deadline of December 31, 2016 for

² The rules requiring the transition to 6.25 kHz efficiency allow but do not require a 6.25 kHz channel bandwidth. The

public safety licensees in the 700 MHz to transition their systems to operate with 6.25 kHz efficiency. In addition, the rules establish an interim deadline of December 31, 2014 after which equipment certified must be capable of a 6.25 kHz efficiency. Under the current rules, equipment manufacturers also are required to cease marketing, manufacturing or importing 700 MHz equipment that is not capable of operating at a 6.25 kHz efficiency by that date.³ This interim date is also the deadline after which new licenses issued would be required to operate with a 6.25 kHz efficiency.

In its Comments, NPSTC recommended the Commission “eliminate the December 31, 2016 deadline that currently would require all public safety 700 MHz licensees to meet the 6.25 kHz or equivalent efficiency requirement by that date.”⁴ NPSTC observes that comments submitted by various parties were almost unanimous on extending the December 31, 2016 narrowbanding deadline for public safety operations, with most supporting elimination of the deadline. NPSTC strongly recommends addressing this through a change in the rules.

NPSTC disagrees with comments recommending the deadline be maintained and addressed through waivers rather than having the rule changed. NPSTC believes there is significant concern about the December 31, 2016 deadline in the current rules expressed in the record. Maintaining the rule would likely result in the Commission being inundated with waiver requests. Therefore, in NPSTC’s view, developing and addressing such waiver requests in this situation would simply waste resources in the public safety community and in the Commission, respectively, with no incremental public interest benefit to requiring that process. Licensees in major metropolitan areas that have planned or implemented systems with 12.5 kHz efficiency must get the full amortization from their investment. Even if they eventually migrate to 6.25 kHz efficiency at a later date such as the 2024 timeframe, they would need a waiver of the December 31, 2016 deadline if the rules are not changed.

efficiency requirement can be met for example with two voice slots operating in TDMA mode in a 12.5 kHz channel. Project 25 Phase II trunked systems operate in this manner and meet the 6.25 kHz efficiency requirement.

³ This prohibition is for 12.5 kHz efficiency-only equipment. Products can continue to include a 12.5 kHz efficiency mode after the deadline, as long as they also include the 6.25 kHz efficiency mode.

⁴ NPSTC Comments at page 4.

Licensees in lesser populated areas may never actually need to transition to 6.25 kHz efficiency from an operational requirement perspective, short of a regulatory mandate to do so. To transition from 12.5 kHz to 6.25 kHz efficiency, those licensees could be forced to make significant added investment for no realizable benefit. Therefore, if the rules are not changed, they also would need waivers.

NPSTC applauds the Commission for recognizing the concerns with the deadline and raising the potential for the deadline to be eliminated or significantly extended through a rule change. NPSTC believes a change in the rules is a much more effective and efficient way to deal with this issue, as compared to multiple waivers.

As noted in NPSTC's Comments, given such a rule change, 700 MHz band licensees would continue to have the option to migrate voluntarily to 6.25 kHz efficiency technology. This option is necessary, especially for spectrum impacted areas as is currently the case with Houston, Texas and other selected jurisdictions. Agencies in such congested metropolitan areas could very well need to implement the higher level of efficiency while states, cities and counties with lower population densities may be able to meet their needs more economically under the current 12.5 kHz efficiency requirement. As noted in its Comments, NPSTC envisions situations in which a given 700 MHz band regional planning committee (RPC) in a congested area could recommend that the Commission require a proposed new system to use 6.25 kHz efficiency.

NPSTC did not specifically address the interim deadline in its Comments. NPSTC recommends the Commission delete the interim deadline as well. Alternatively, should the Commission decide not to delete the operational implementation deadline and instead to extend it significantly (e.g., to December 31, 2024), the interim deadline for marketing, manufacture, and import should be set one to two years ahead of the operational implementation deadline.

NPSTC notes that the Commission rules for the 700 MHz band are based on interoperability with the Project 25 standard.⁵ Therefore, most equipment deployed is based on the Project 25 standard, which enhances interoperability. The Project 25 standard has two phases. Project 25 Phase I, provides 12.5 kHz efficiency and is applicable to both conventional and trunked systems. In recognition of the Commission's current efficiency rules at 700 MHz, public safety and industry cooperated to develop the Project 25 Phase II standard, which provides 6.25 kHz efficiency using two slot TDMA in a 12.5 kHz channel. However, the Project 25 Phase II standard is applicable only to trunked systems, not to conventional systems.

Maintaining the current rule requiring 6.25 kHz efficiency capability for all 700 MHz narrowband equipment manufactured, imported or certified after December 31, 2014 would therefore create a significant problem for licensees with conventional systems or operations.⁶ NPSTC notes that analysis of the Commission's 700 MHz database shows that as of June 30, 2013, approximately two thirds of the permanent licenses in the general use channels are classed as trunked with the remaining one third conventional.⁷

While equipment providing combined trunked and conventional modes could meet the requirement and therefore be readily available, NPSTC believes licensees not needing trunked operation or the added capacity of 6.25 kHz operations may be forced to pay the extra cost for trunking and the increased efficiency regardless. To the extent an agency could purchase 700 MHz band conventional equipment and later add trunking and/or Project 25 Phase II modes through software upgrades only if/when needed, there is less concern on this cost issue. However, this would

⁵ Mobile and Portable units must include a Project 25 Phase I standard mode and operation on the interoperability channels must utilize Project 25 Phase I.

⁶ The current rules do not distinguish between trunked and conventional modes of operation from a certification, or import/manufacture prohibition perspective.

⁷ Overall, including systems on state designated channels, the ratio of trunked systems is likely to be somewhat higher. However, detailed information on the wide area licenses for the designated state channels is not maintained in the Commission license database, so that information cannot be factored into the analysis.

still require the Commission to eliminate the 6.25 kHz interim deadline for conventional equipment, since the Project 25 Phase II standard is applicable only to trunking and not to the conventional mode of operation.

Should technologies other than Project 25 be introduced at 700 MHz, interoperability would suffer. We remind the Commission that (from the PSWAC *Final Report*) well over 90% of all interoperability based on the number of push-to-talks (PTTs) is classified as Day-to-Day where neighbors of necessity operate on each other's infrastructures; this is the basis of such important concepts as automatic aid in the Fire/Rescue service. A change to a non-Project 25 standard infrastructure would destroy interoperability within that jurisdiction unless all of its supporting neighbors purchase new equipment capable of operating on that infrastructure as well.

While in a different band, a recent example of "infrastructure-based interoperability" is the communications supporting the response to the July 6 crash of Asiana Airlines Flight 214 at San Francisco International Airport (SFO). Command & Control communications for the response to this incident remained on the SF City & County 800 MHz trunked radio system which had good coverage on the airport tarmac. Responding agencies from the immediate area, including such diverse agencies as the California Highway Patrol's air wing (a fixed wing and helicopter both responded) that searched the SF Bay immediately off of the approach where the tail section of the plane was severed, all switched to the designated SFC&C trunked system talkgroup. Had the technology been incompatible or the proper frequency planning and talkgroup coordination not been conducted in advance, additional delays likely would have occurred that could have resulted in added loss of life.

In summary, NPSTC recommends that both the December 31, 2016 operational implementation and the interim December 31, 2014 deadlines be eliminated. Should the Commission choose not to eliminate these deadlines, NPSTC recommends the operational implementation deadline be extended until at least December 31, 2024, with the interim deadline occurring one to two years prior.

2. Project 25 Compliance Assessment Program (CAP)

NPSTC observes that the comments of most public safety agencies and system owners support the mandatory use of the CAP Program as proposed by the Commission. However, NPSTC is concerned that this support may be absent a full understanding of the manufacturer-related issues as especially well-delineated in the EF Johnson Technologies, Inc. comments.⁸ Portions of the CAP for testing conformance to protocol standards have not been completed, and there is no CAP for testing P25 6.25 kHz Phase II equipment. As Harris Corporation notes in its filing, P25 equipment exists in all public safety bands (except the 30-50 MHz VHF Low Band), with numerous systems implemented in those other bands, and that the challenges to interoperability include other significant factors beyond technical compliance.⁹ Motorola Solutions notes that CAP is currently an independently run, voluntary program administratively funded by the Department of Homeland Security whose design and requirements are based on a voluntary rather than a mandatory program.¹⁰

NPSTC shares APCO's position that, while there would be benefits to mandating CAP compliance, the concerns multiple manufacturers highlighted in their comments as noted above are significant.¹¹ Considering these issues, should the Commission wish to pursue the CAP program further, NPSTC recommends that the proposed CAP testing mandate be considered as part of a separate and "holistic" rulemaking that considers the range of operational and technical issues associated with interoperability and CAP compliance.

⁸ See Comments of EF Johnson Technologies, Inc. at page 4.

⁹ See Comments of Harris Corporation, at page 10.

¹⁰ See Comments of Motorola Solutions, Inc., at page 11.

¹¹ See Comments of APCO, at page 5.

3. Clarification on Travel Channel

NPSTC's vision for a Travel Channel is to provide a channel for use in coordinating among resources traveling together while en route as well as directing resources as they arrive on scene. Based on a review of the Michigan Region 21 (RPC 21) Comments, NPSTC believes there may be some misunderstanding of the Travel Channel as proposed in NPSTC's 2008 Petition.¹² RPC 21 states "...it is our opinion that the proposal violates certain tenets of the Incident Command System" and later that "...the proposal seems to fly in the face of current NIMS guidelines. What Incident Commander (IC) would deem it desirable to deploy resources without first determining precisely what he or she was receiving in terms of equipment and personnel and without first assuring that responding personnel would be properly accounted for?"

RPC 21 also suggests that the existing Calling Channels could be used instead for the purposes proposed by NPSTC. However, the Calling Channels are the only FCC-designated nationwide interoperability channels with specific definition on their permissible use within Part 90. Some of the following uses for the Travel Channel, as envisioned by NPSTC in its Petition, are inconsistent with the permissible use for the Calling Channels. Proposed NPSTC uses for the Travel Channel include, but are not limited to:

- Simplex communications for coordination between responding personnel and/or vehicles making up a Strike Team, Task Force, or other group of responding resources;
- Contact with a local agency for assistance or support (directions, equipment repair due to a vehicle breakdown, etc);
- Contact with Incident Command and/or Resource Unit while still some distance away for cancellation or redirection to a different incident and/or change of Staging Area location; and
- Collection of responder information or follow-on questions.

¹² See *Comments of the Michigan Public Safety Frequency Advisory Committee* for 700 MHz RPC Region 21, page 4.

NPSTC will reach out to RPC 21 to help clarify the Travel Channel proposal and to discuss concerns addressed in the RPC 21 comments. If necessary, NPSTC envisions the submission of a subsequent ex parte filing addressing the resolution of those discussions.

The Northern California Region 6 RPC Comments¹³ state “The fire service in California has been using a statewide VHF channel as a travel channel for fire crews responding long distances to large wildland fires for years with great success. The travel channel provides a channel for use in coordinating among resources traveling together while en route as well as directing resources as they arrive on scene.” Beyond being installed in the mobiles/portables of most fire apparatus in California, the system they reference includes a statewide microwave-interlinked mobile relay system infrastructure licensed to, and maintained/operated by, the Governor’s Office of Emergency Services, supplemented by local base and control stations in most of California’s 58 counties. It is routinely used to support the functions listed above for long-distance fire/rescue service response to major incidents.

In its Comments, the State of Florida proposes that operations on the Travel Channel be limited to mobile and temporary relays (MO & FB2T), with no mobile relay (FB2) operations permitted.¹⁴ NPSTC is concerned that such restrictions would preclude several of the major uses proposed for this channel pair that require wide-area communications. California has shown in the successful use of its VHF Travel Channel for many years that the “co-channel chaos” suggested by Florida can be controlled by proper coordination of mobile relay stations at the state level, either by the State as sole licensee, as in California’s case, or by an RPC or SIEC. NPSTC is happy to have further discussions with Florida on this issue to help ensure all concerns are fully understood, vetted and addressed to the maximum extent possible.

¹³ See Comments of the Region 6 (Northern California) Regional Planning Committee, page 3, Paragraph C(1).

¹⁴ See Comments of the State of Florida, page 3, paragraph 7.

In its Comments, the State of Maryland is concerned that the proposed Calling Channel definition is too restrictive.¹⁵ NPSTC notes that the intent of its 2008 Petition was broad, as further delineated in the list of potential uses above. Further, Maryland proposes “that the permitted use of a travel channel should be expanded to allow law enforcement communications related to out-of-state official business.”¹⁶

NPSTC will discuss this further with representatives from the State of Maryland. NPSTC notes that, with no restriction on licensed area of operation (due to “licensing by rule”) for mobile and portable units in the 700 MHz band, such law enforcement use as proposed by Maryland is already permissible on any of the nationwide interoperability channels, except for the Calling Channels, or on any of the nationwide Itinerant Channels defined in 90.531(b)(4), especially if the power on these latter channels is increased as discussed elsewhere in this current NPRM. The ANSI Naming Standard proposes several 700 MHz channels to be used as “first go-to” for law enforcement (e.g., 7LAW68/68D and 7LAW69/69D) that may also help meet the need of Maryland’s law enforcement units regardless of where they are operating in the country, as long as they are following appropriate use guidelines of the associated RPC(s)/SIEC(s) where they are operating.¹⁷

4. The Commission Should Release the Reserve Channels for Deployable Systems as well as for Permanent Use in High Demand Areas per RPC Recommendations

NPSTC continues to support the position presented in its original Comments on this NPRM that the Reserve Channels can be usefully deployed simultaneously for deployable systems and for permanent systems in high demand areas, as combined General Use/Interoperability trunked channels. In doing so, certain requirements in system design and programming should be established

¹⁵ See *Comments of the State of Maryland*, page 16, paragraph 30.

¹⁶ *ibid.*, paragraph 31.

¹⁷ See *APCO/NPSTC ANS 1.104.1-2010* page 18.

through the ANSI/TIA-102 (Project 25) Phase 1 trunking standards development process.

It is clear that 700 MHz voice spectrum is in high demand in major metropolitan areas, as supported by the earlier waiver request and Comments from LA-RICS, and also the Comments of the WMATA.¹⁸ Support for NPSTC's Petition with similar, but varying, recommendations on how to implement deployable trunking and/or a combination of General/State Use were offered in the comments of APCO, CPRA, CA RPC 6, DE/NJ/PA RPC 28, and TX RPC 49.

There appears to be some possible misunderstanding of the NPSTC Petition intent on this topic as expressed in Comments by the State of MD and Michigan Regional Planning Committee (RPC) 21. NPSTC will discuss the issues with these two organizations and if needed, a subsequent *ex-parte* filing can address any further clarifications resulting from those discussions.

Comments by the State of Florida¹⁹ support allocating some of the Reserve Channels for Interoperable Use with the balance remaining as Reserve Channels to accommodate waivers such as that filed by LA-RICS; with a recommendation against designating the balance as State Use but noting that local and state agencies might benefit from their designation as General Use. Importantly, Florida notes that designation of Interoperable Use channels would allow it to migrate its current statewide deployable equipment from secondary to primary trunked operations. Florida emphasizes the use of Project 25 standards for these deployable systems, noting the importance of addressing "...issues and standards..." as referenced in Paragraph 115 of the FNPRM.

¹⁸ See *Comments of the Washington Metropolitan Area Transit Authority (WMATA)*, page 4.

¹⁹ See *Comments by the State of Florida to the Notice of proposed Rulemaking*, page 6, paragraph 10.

Similar to Florida, comments by Adams County Colorado²⁰ and Colorado RPC 7²¹ note that the State of Colorado has secured deployable mobile trunked infrastructure for its statewide 700/800 MHz trunked system to be transported to an incident area to “assist with emergency response and recovery.” Reassignment of Reserve Channels for this purpose would allow Colorado to migrate its system to these channels, freeing up General/State Use Channels now reserved for this function. Colorado commenters agree that this designation “would allow 700 MHz licensees to pre-program these channels into their subscriber radios, negating the need during a disaster to reprogram radios in the field or distribute cached radios, both of which are time consuming and may be impossible depending upon the nature of the emergency.” Colorado likewise supports a requirement for compliance with ANSI/TIA-102 (Project 25) standards to promote interoperability. As with Colorado and Florida, NPSTC notes that other systems, regions and states have likewise set aside State and/or General Use channels for current deployable trunked systems that could be migrated to these nationally designated channels, releasing their current channels for use within their designated pools.

Finally, NPSTC notes that the genesis for the 700 MHz band was the PSWAC *Final Report* released on September 11, 1996. That *Report* concludes that “**unless immediate measures are taken to alleviate spectrum shortfalls and promote interoperability, Public Safety agencies will not be able to adequately discharge their obligation to protect life and property in a safe, efficient, and cost effective manner.**”²² [emphasis included]

²⁰ See *Comments by Adams County Communication Center (Adcom911, Inc.) Concerning the Seventh Report and Order Notice of Proposed Rulemaking*, page 4, paragraph C(3).

²¹ See *Comments by the Region 7 (Colorado) Regional Planning Committee Concerning the Seventh Report and Order Notice of Proposed Rulemaking*, page 4, paragraph C(3)

²² See *Final Report of the Public Safety Wireless Advisory Committee (PSWAC)*, Executive Summary, page 2.

In its Key Recommendations, the *Report* states:

“The Steering Committee concluded that, in the short term, voice and data operations require approximately 25 MHz of new Public Safety allocations. By the year 2010, as much as an additional 70 MHz may be needed for these applications, including image and video requirements. The Steering Committee supports 2.5 MHz [10% of the overall allocation] of spectrum for interoperability in the VHF and UHF bands between 138 MHz and 512 MHz.”²³

The recommended 25 MHz of spectrum, with action by Congress in Title III, Section 3004 of the Balanced Budget Act of 1997 (PL 105-33) and reallocation by the FCC, became the actual 24 MHz of spectrum from TV channels 60-69 that constituted the initial 700 MHz Public Safety band.²⁴ The twelve MHz of that was designated for narrowband voice is the subject of this FNPRM. While a few channels in the 138 MHz to 512 MHz bands – the VCALL/VTAC and UCALL/UTAC channels - were identified and reallocated for interoperability use in the 3rd R&O of this Proceeding, the majority of interoperability spectrum, was from the 12 MHz of 700 MHz narrowband voice allocation.

NPSTC believes that the intent of Congress in allocating this spectrum was following that recommendation of the PSWAC *Final Report* that 10% of the allocated spectrum (which equates to 1.2 MHz of 700 MHz narrowband voice spectrum) be reserved for interoperability uses remains. With the dramatic increase in Homeland Security activities and incidents following September 11, 2001, and the plethora of recent disasters (from Katrina to Sandy to the series of wildfires sweeping the Western States in 2013) there is no reason to believe that the need for interoperability spectrum has been reduced. However, only 800 kHz of that 1.2 MHz of interoperability spectrum (thirty-two

²³ *Ibid*, page 21, Section 2.2.1.

²⁴ Addition of the D block has subsequently added additional spectrum for broadband.

12.5 kHz pairs) are reserved for interoperability use today. If the additional eight 12.5 kHz pairs of spectrum are allocated for air-ground interoperability use as proposed in this FNPRM, that will raise the total to 1.0 MHz. Therefore, NPSTC suggests that at least eight 12.5 kHz channel pairs from the Reserve Spectrum be dedicated for interoperability use as deployable trunked channels, constituting the remaining 200 kHz of spectrum to reach a total of 1.2 MHz. A requirement for compliance with the ANSI/TIA-102 (Project 25) Phase 1 trunking standards should be included in the R&O issued subsequent to this FNPRM. Specific requirements for system ID, talkgroup IDs and unit IDs should be addressed subsequently by the public safety community, along with a conversion timeframe once these issues have been standardized by ANSI/TIA through the Project 25 process for agencies that have implemented early deployable systems,

Conclusion

In these Reply Comments, NPSTC has reaffirmed and clarified some of its positions as addressed in the previous round of comments. Specifically, NPSTC recommends the Commission 1) eliminate or significantly extend both the current December 31, 2016 and interim December 31, 2014 deadlines related to 6.25 kHz efficiency operation; 2) open a separate proceeding to examine more fully technical and operational issues if it decides to further address the Project 25 CAP process; and 3) release the reserve channels for deployable systems as well as for permanent use in high demand areas per regional planning committee (RPC) recommendations. NPSTC also references comments submitted by several public safety entities on the Travel Channel proposal and plans to reach out to those entities for further more detailed discussions to clarify the proposal and to better understand and address concerns they expressed.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ralph A. Haller", with a long horizontal flourish extending to the right.

Ralph A. Haller, Chairman

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